

### **REMARKS/ARGUMENTS**

Reconsideration of this application is requested. Claims 144 – 153 are now pending in the application, previous claims 134 – 143 being withdrawn.

The claims have been revised in order to more particularly point out and distinctly claim that which applicants regard as their invention. In particular, new claim 144 specifies that the drug is located in the pores of the porous silicon, and that the porous silicon is resorbable mesoporous silicon. Mesoporous silicon is described in the specification at page 5, lines 4-6 from which the silicon implant is prepared. Drug substance is located at least partially in the pores of the porous silicon. The method provides for implantation then allowing the porous silicon to erode as discussed in the last paragraph of page 27 of the specification.

The new claims find basis in the original description as follows:

| <u>New Claim</u> | <u>Basis</u>  |
|------------------|---|
| 144              | PCT claims 1, 2, 4, page 4, lines 4-6, & page 27, lines 5-10; |
| 145              | page 5, lines 4-5   |
| 146              | page 4, lines 1-4   |
| 147              | page 3, lines 16-17   |
| 148              | page 3, lines 16-17   |
| 149              | page 2, line 12   |
| 150              | page 7, lines 21-22   |
| 151              | page 5, lines 17-18   |
| 152              | PCT claim 13  |
| 153              | PCT claim 15  |

The new claims do not include added subject matter.

The issues raised in the Official Action center on two prior art-based rejections, the first directed toward claims 134-139 and 142-143 and the second to claims 140 and 141. To the extent that the examiner's concerns may extend to the revised claims presented above, these rejections are traversed. The sole reference in the first rejection and the primary reference in the second rejection represent the inventive effort of the senior applicant in respect of the present application, Lee Canham. Attached is Professor Canham's Declaration made August 12, 2003 which will be referred to in the remarks that follow. It is appropriate that Professor Canham comment upon this citation as it represents his own work.

Canham WO '101 describes a sample of porous silicon into which calcium has been introduced (page 14, lines 1 to 10). WO '101 also describes the use of bioactive silicon for drug delivery (page 6, lines 5 to 6 and page 16, lines 5 to 6). WO '101 does not disclose a resorbable mesoporous silicon implant having a drug located in its pores. Professor Canham's declaration (pages 3 and 4) supports this statement.

WO '101 describes a drug delivery device composed of bioactive silicon (page 6, lines 5 to 6). The main uses of bioactive silicon, described in WO '101 are as a packaging material and as a material for bonding devices to bone or tissue. This is discussed in paragraph 5 of Professor Canham's declaration.

Therefore when viewed by a person skilled in this art the WO '101 disclosure would lead the skilled person away from the use of resorbable mesoporous silicon for drug delivery. This is because resorbable mesoporous silicon would corrode, preventing it from acting as a protective covering or attachment means. This is supported by paragraph 6 of Professor Canham's declaration.

There is nothing in WO '101 that would link the use of resorbable mesoporous silicon to drug delivery. This is supported by paragraph 7 of Professor Canham's declaration.

CANHAM et al.  
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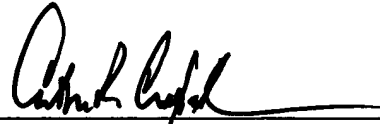
For the above reasons it is respectfully submitted that claims 144-153 define subject matter that is inventive and patentable over the disclosures of the documents cited and applied against the previous claims.

Allowance is awaited.

Respectfully submitted,

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